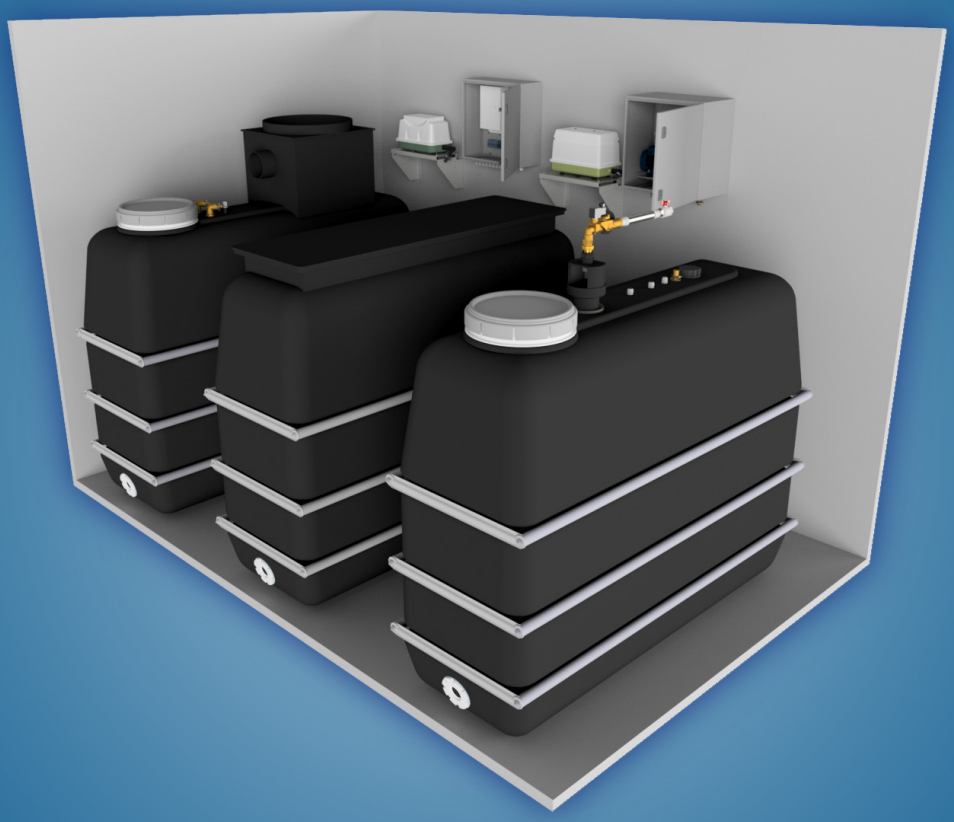
GREYWATER SYSTEMS



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GREYWATER SYSTEM APPLICATIONS

Designed for effluent water reuse in a variety of applications

- Commercial Sites
- Large Residential Properties
- Industrial Sites
- Agricultural & Farming
- Manufacturing

GREYWATER SYSTEM

PRODUCT OVERVIEW

The DPT Greywater System collects wastewater from showers, baths, sinks, and washing machines. This water is then filtered to provide a non-potable water supply which can be used for flushing toilets or irrigation purposes.

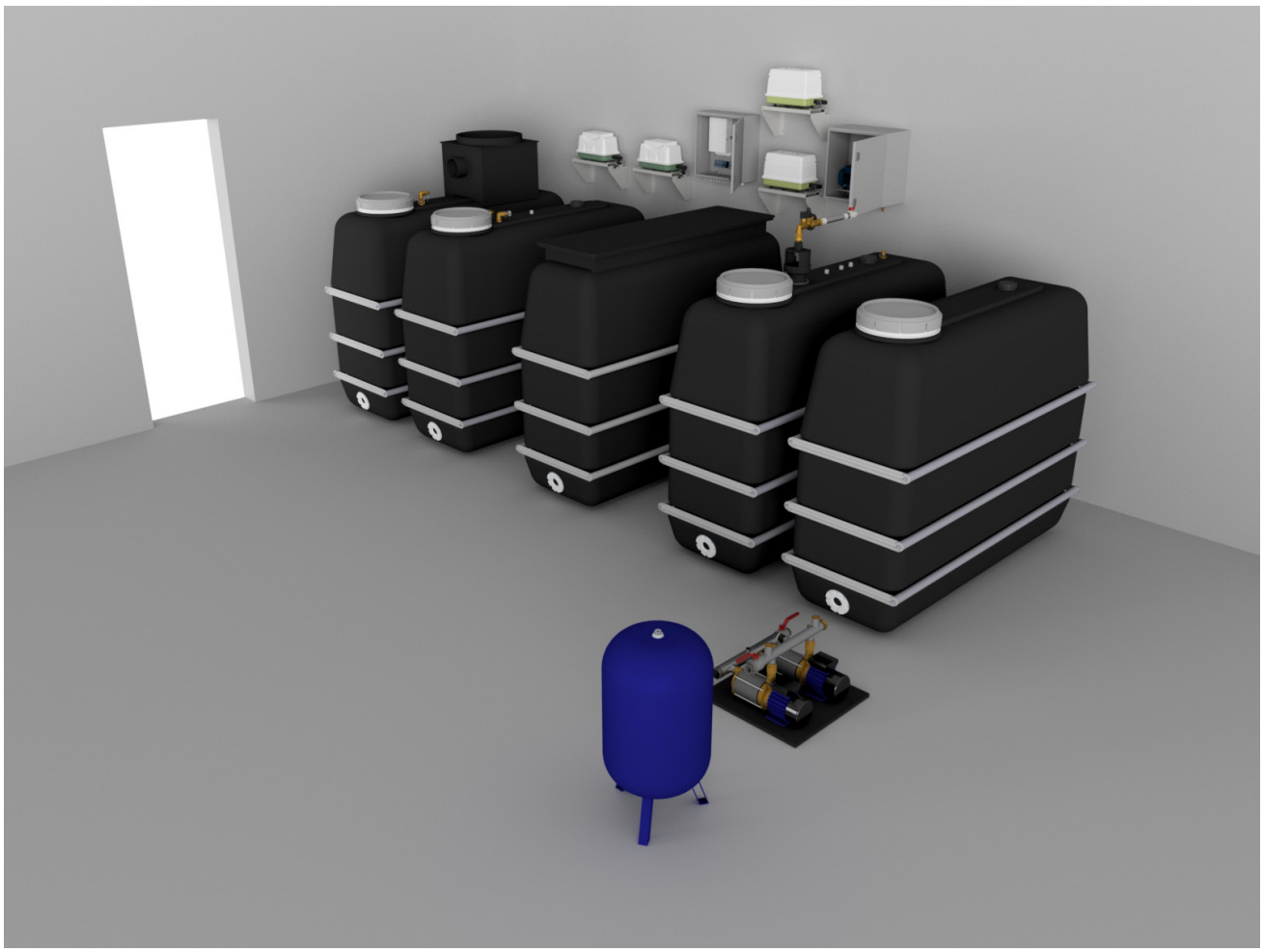
Our Greywater system offers an alternative water management solution when rainwater harvesting is not possible. Alternatively, it can be paired with DPT rainwater harvesting systems for increased water harvesting and reuse.

The Greywater System is available in 2000, 4000 and 6000 litres. Which can process 2000 l/day, 4000 l/day and 6000 l/day respectively.

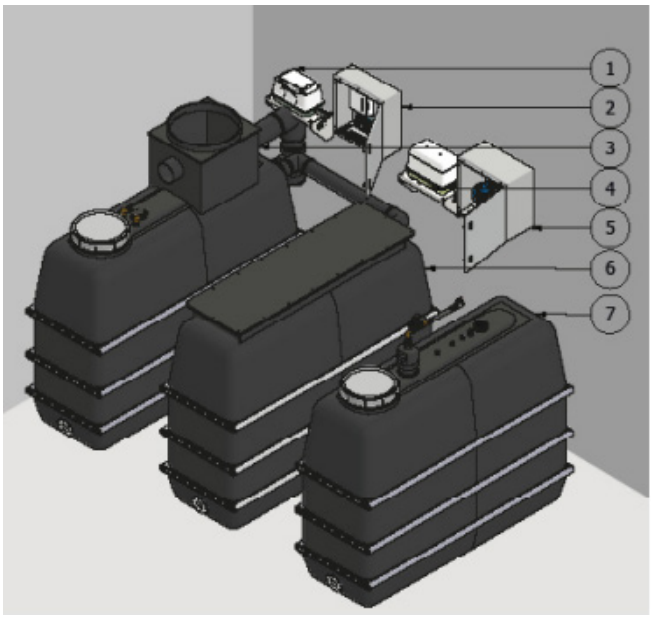
Expansion is done by adding additional tanks and extra membrane filter packages. Other volumes are available upon request.

SYSTEM SPECIFICATION

	2000 litres	4000 litres	6000 litres
Max Capacity	2 l/min	4 l/min	6 l/min
Voltage (50Hz)	230V	230V	230V
Current	4.6 A	6.0 A	6.9 A
Max Power	1.1 kW	1.4 kW	1.6 kW
Influent Diameter	160 mm	160 mm	160 mm
Effluent Diameter	1"	1"	1"
Overflow Diameter	160 mm	160 mm	160 mm



2000L GREYWATER SYSTEM



1. Compressor GWT
2. GWM Control
3. Grey water tank (GWT) of 2000 litres
4. Compressor MWT
5. Membrane pump box
6. Membrane water tank (MWT) of 2000 litres
7. Clean water tank (CWT) of 2000 litres

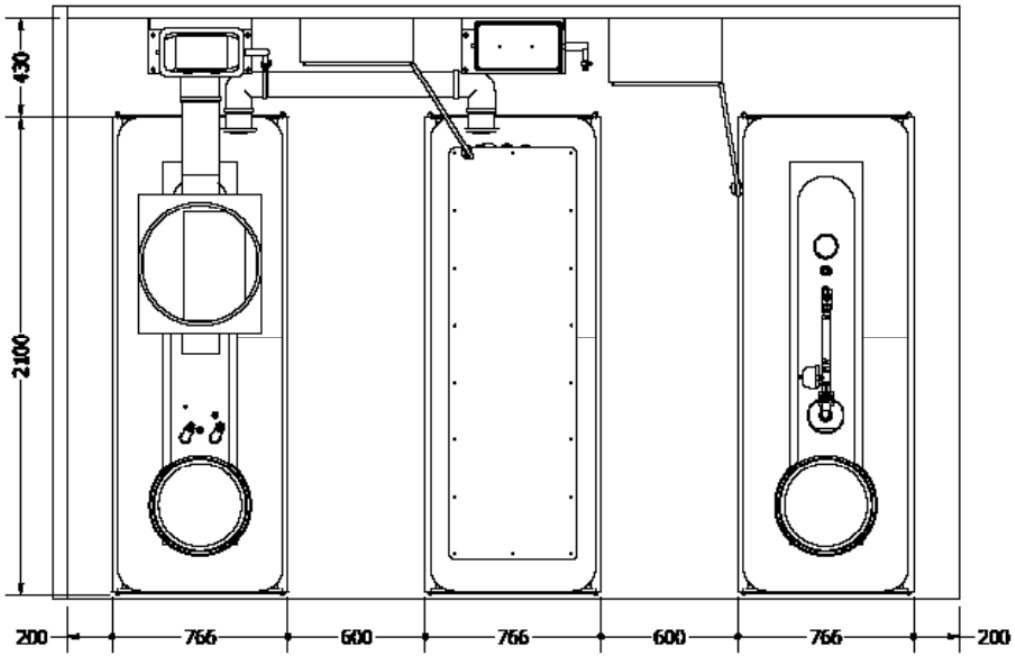
The installation space must be taken into account for the drain pump/pressure boosting pump and pressure vessel.

INSTALLATION DIMENSIONS

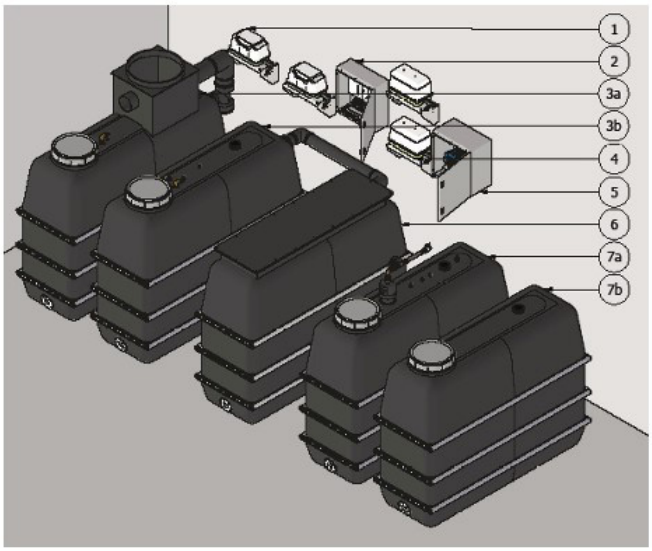
Total required width	3988 mm
Total required depth	2530 mm
Total required height	2500 mm
A (mm)	200 mm
B (mm)	766 mm
C (mm)	600 mm
D (mm)	430 mm
E (mm)	2100 mm

TECHNICAL SPECIFICATIONS

Max capacity	2000 L
Flow rate	2 l/min
Voltage (50Hz)	230 V
Current	4.6 A
Max power	1.1 kW
Influent diameter	160 mm
Effluent diameter	1"
Overflow diameter	160mm



4000L GREY WATER SYSTEM



1. Compressor GWT x2
2. GWM Control
3. Grey water tank 1 (GWT) of 2000 litres
4. Grey water tank 2 (GWT) of 2000 litres
5. Compressor MWT x2
6. Membrane pump box
7. Membrane water tank (MWT) of 2000 litres
8. Clean water tank (CWT) of 2000 litres
9. Clean water tank 2 (CWT) of 2000 litres

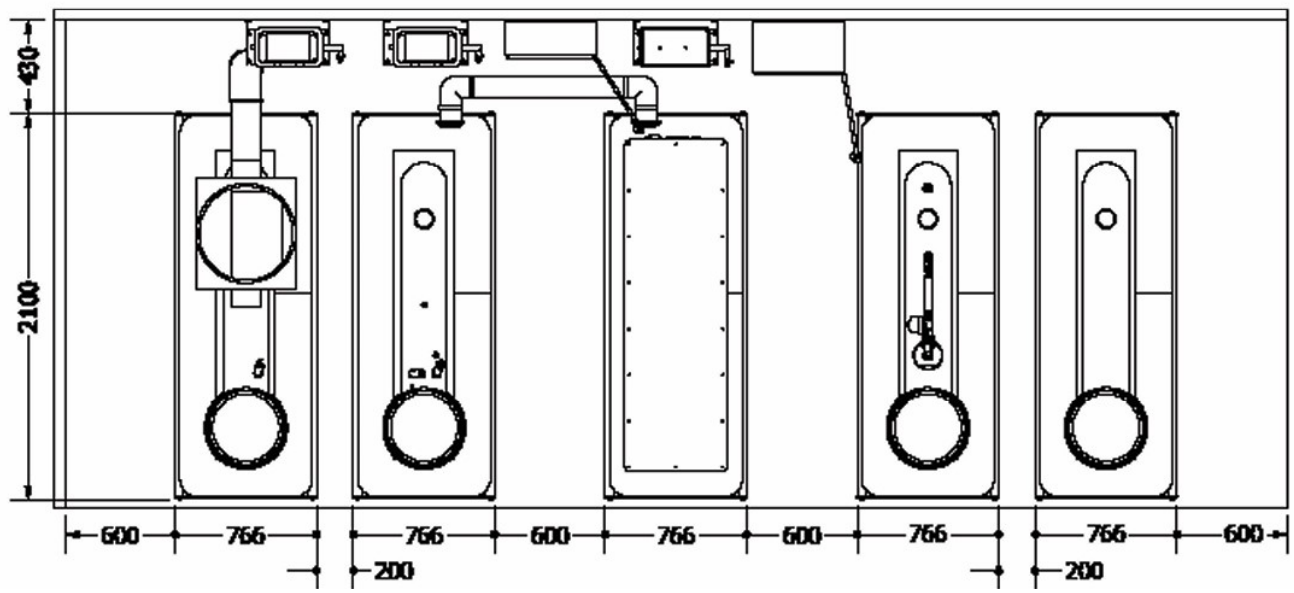
The installation space must be taken into account for the drain pump/pressure boosting pump and pressure vessel.

INSTALLATION DIMENSIONS

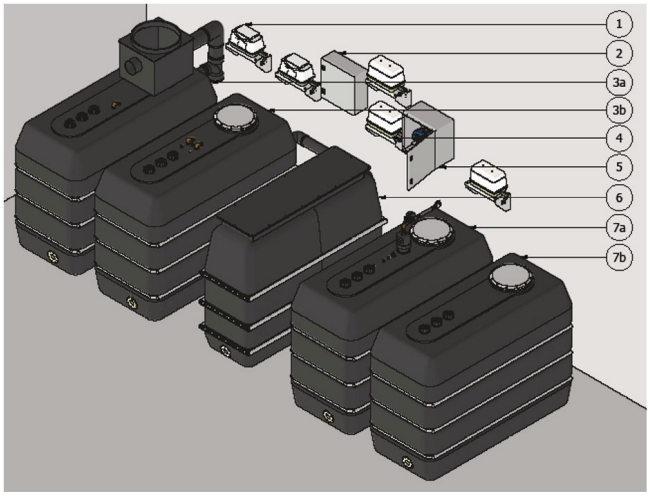
Total required width	5864mm
Total required depth	2530 mm
Total required height	2500 mm
A (mm)	600 mm
B (mm)	766 mm
C (mm)	200 mm
D (mm)	430 mm
E (mm)	2100 mm

TECHNICAL SPECIFICATIONS

Max capacity	4000 L
Flow rate	4 l/min
Voltage (50Hz)	230 V
Current	6.0 A
Max power	1.4 kW
Influent diameter	160 mm
Effluent diameter	1"
Overflow diameter	160mm



6000L GREYWATER SYSTEM



1. Compressor GWT x2
2. GWM Control
3. Grey water tank 1 (GWT) of 3000 litres
4. Grey water tank 2 (GWT) of 3000 litres
5. Compressor MWT x3
6. Membrane pump box
7. Membrane water tank (MWT) of 2000 litres
8. Clean water tank (CWT) of 3000 litres
9. Clean water tank 2 (CWT) of 3000 litres

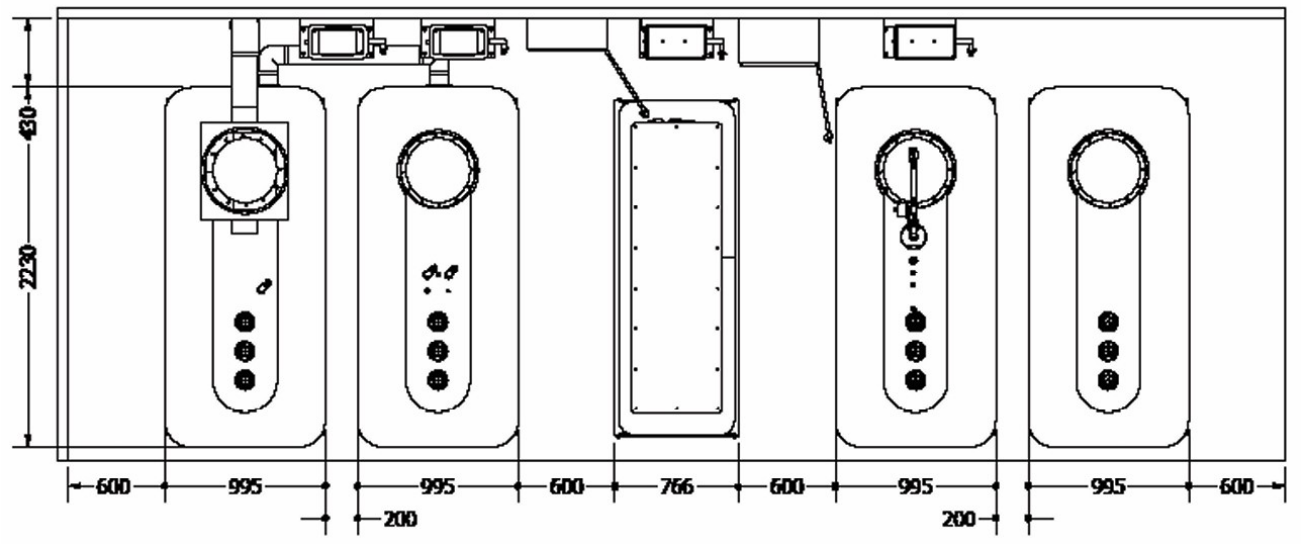
The installation space must be taken into account for the drain pump/pressure boosting pump and pressure vessel.

INSTALLATION DIMENSIONS

Total required width	7546 mm
Total required depth	2660 mm
Total required height	2500 mm
A (mm)	600 mm
B (mm)	995 mm
C (mm)	200 mm
D (mm)	430 mm
E (mm)	2230 mm

TECHNICAL SPECIFICATIONS

Max capacity	6000 L
Flow rate	6 l/min
Voltage (50Hz)	230 V
Current	6.9 A
Max power	1.6 kW
Influent diameter	160 mm
Effluent diameter	1"
Overflow diameter	160mm



INDOOR GREYWATER TANK

The greywater tank (GWT) collects the incoming grey water and buffers it for further processing. The grey water tank has a trident grey water pre-filter with automatic filter cleaning.

The pre-filtered water enters the tank through a quiet supply. The aerator ensures that dirt is pushed up through the skimmer overflow and leaves the tank. Settled dirt should be cleaned once a year.

The pre-filtered water is pumped to the membrane water tank via a submersible pump (WW 2/20) with a fixed height. At low levels in the grey water tank, the filter pump is stopped to prevent dry running.

SCOPE OF DELIVERY

Product consists of: plastic inner tank, including lid, closure and steel support frame.

Trident-Greywater filter with automatic flushing, quiet supply and an overflow. A wall mounted compressor with aerator. Skimmer overflow and a submersible pump for pumping over from the pre-filtered water to the membrane water tank.

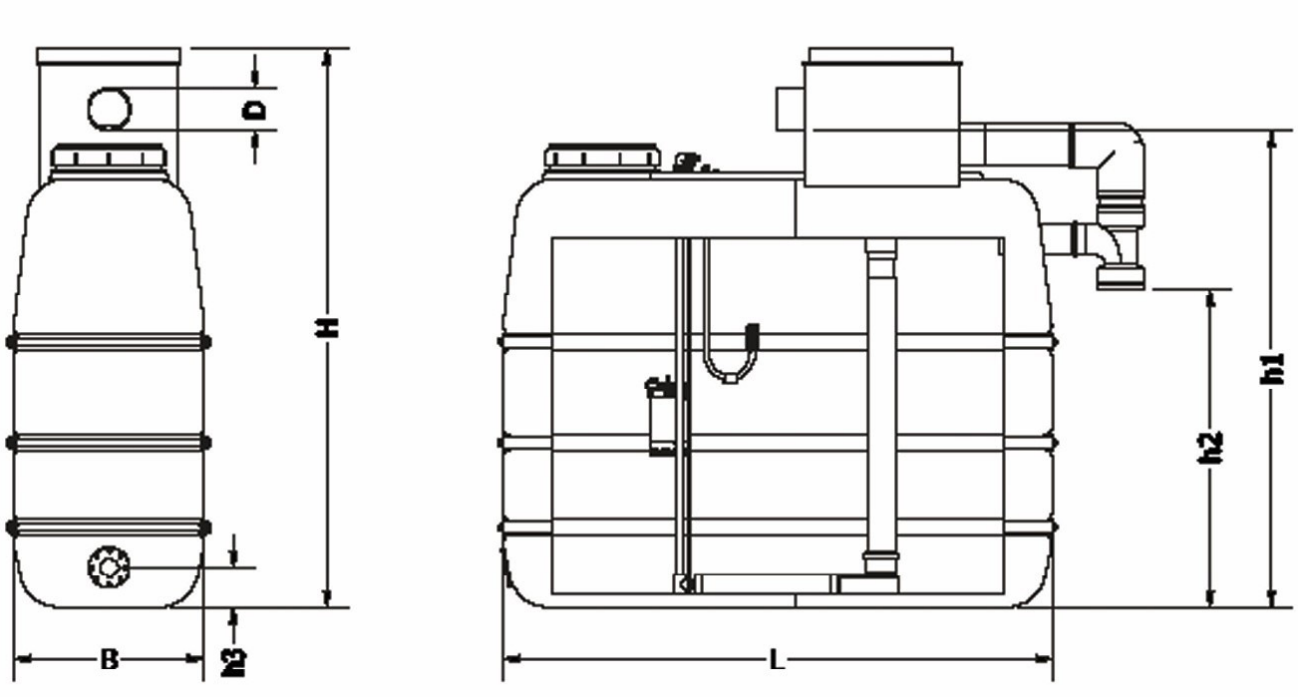
TECHNICAL DATA

	GWT 2000 GWT 4000	GWT 6000
L in mm	2 l/min	4 l/min
B in mm	230V	230V
H in mm	4.6 A	6.0 A
h1 in mm	1.1 kW	1.4 kW
h2 in mm	160 mm	160 mm
h3 in mm	1"	1"
D in mm	160 mm	160 mm

TECHNICAL SPECIFICATIONS

	GWT 2000	GWT 4000 GWT 6000
Influent diameter	160 mm	160mm
Effluent diameter	25 mm / 1"	25 mm / 1"
Overflow diameter	160 mm	160 mm
Aerator connection	20 mm	20mm
Voltage (50Hz)	230 V	230 V
Max current	2.0 A	2.5 A
Max power	0.47 kW	0.57 kW
Air flow	100 l/min	200 l/min

TECHNICAL SCHEMA



COMPONENTS

Submersible pump

Aerator

Compressor

Grey water filter

INDOOR MEMBRANE WATER TANK

Within the membrane water tank (MWT), the grey water is passed through membranes filtered and UV treated to kill bacteria. After this it will be pumped into the clean water tank for use.

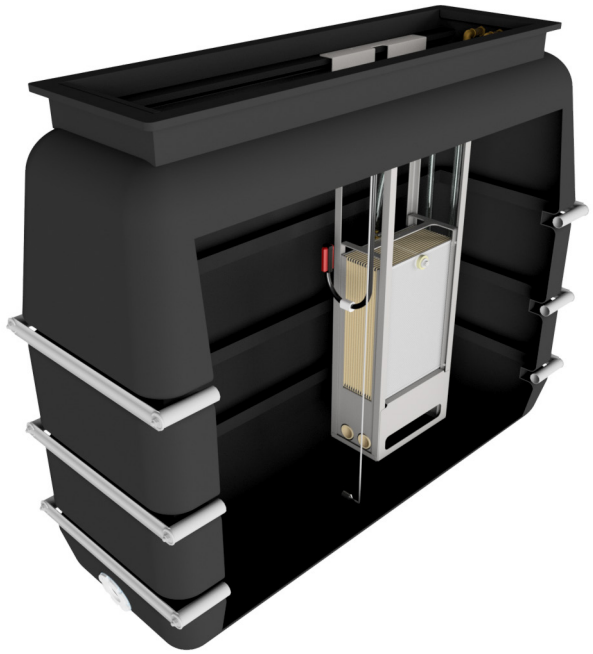
Expandable membrane filter packages have been placed in the greywater tank, 2,000 l/day per set, maximum 3 sets (6,000 l/day) per tank. The water is drawn through the membranes with a ‚low flow' pump. An aerator is placed under each membrane filter package to create flow in the tank.

The air bubbles also help the membranes to keep clean. The flow can be regulated with a valve in the pump cabinet. A negative pressure safety device prevents the membranes from collapsing due to negative pressure.

A flow meter records the amount of filtered water. The water passes a UV lamp that kills bacteria. A UV sensor detects when the lamps need replacing. A pressure sensor has also been placed in this tank to monitor the level in the tank to measure.

A high level float switches the submersible pump off prevent waste.

The MWT is equipped with a return line to the GWT. The concentration pollution in the MWT will decrease as a result.



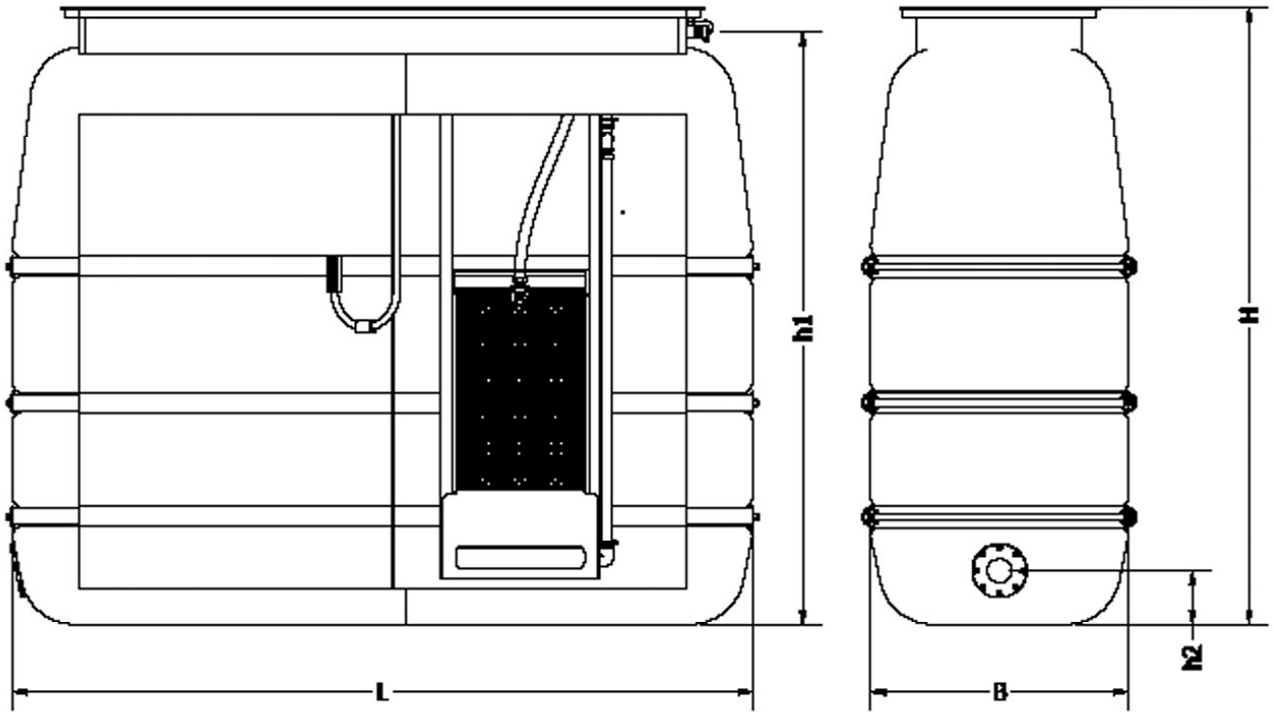
TECHNICAL DATA

L in mm	2070
B in mm	720
H in mm	1730
h1 in mm	1658
h2 in mm	150

TECHNICAL SPECIFICATIONS

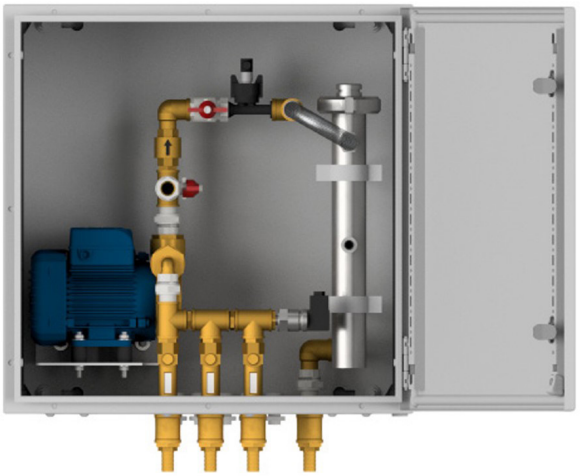
	MWT 2000	MWT 4000	MWT 6000
Influent diameter	25 mm / 1"	25 mm / 1"	25 mm / 1"
Effluent diameter	16 mm	2 x 16 mm	3 x 16 mm
Overflow diameter	110mm	110 mm	110mm
Aerator connection	20 mm	2 x 20 mm	3 x 20 mm
Voltage (50Hz)	230 V	230 V	230 V
Max current	2.6 A	3.5 A	6.0 A
Max power	0.60 kW	0.81 kW	1.4 kW
Air flow	100 l/min	200 l/min	300 l/min

TECHNICAL SCHEMA



COMPONENTS

Membrane filter



Membrane pump box

INDOOR WATER TANK

The filtered water is collected in the clean water tank (CWT) to be used further.

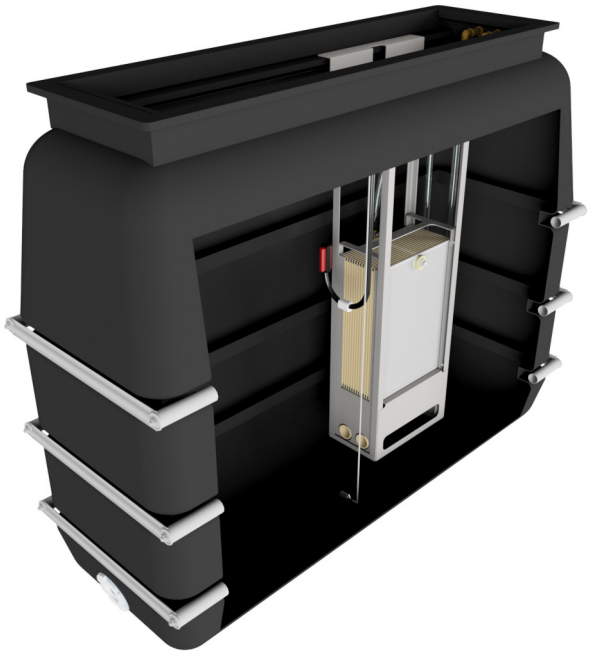
If the level in the tank is too low, drinking or rain water is automatically added via a KIWA-certified connection. A high-level float ensures a timely shutdown when the tank is full.

SCOPE OF DELIVERY

Product consists of: plastic inner tank, including lid, closure and steel bandages. a KIWA certified drinking/rainwater connection with quiet supply, level sensor, float switch.

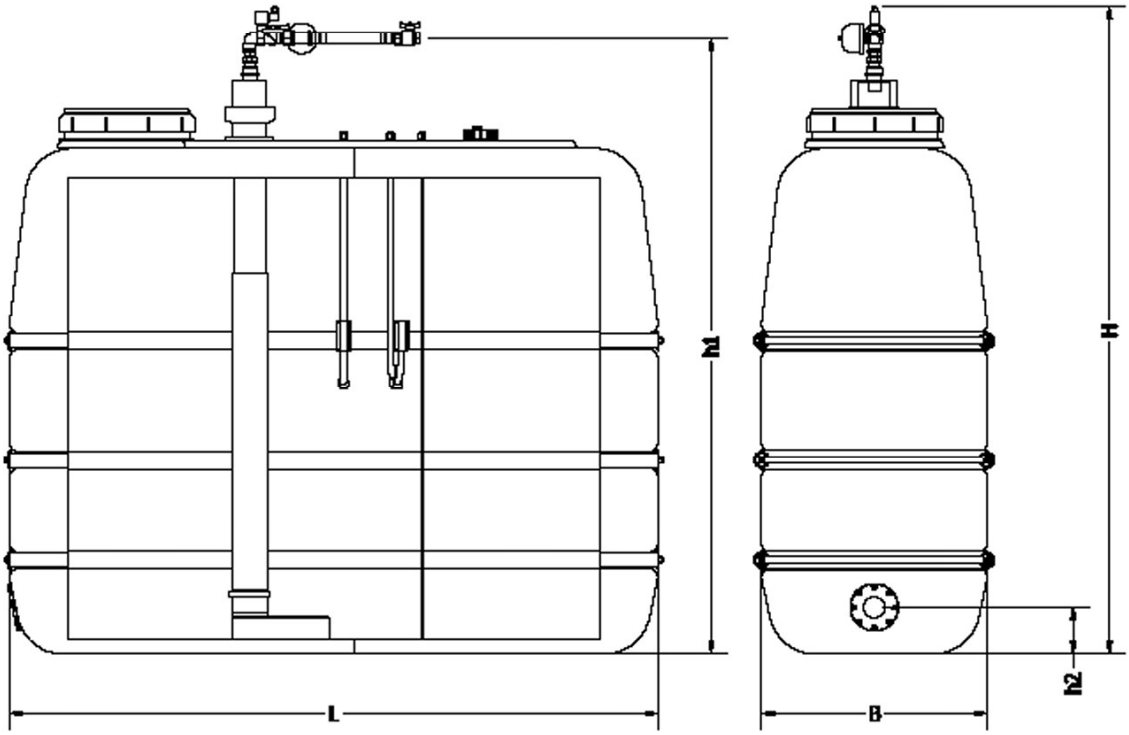
TECHNICAL DATA

	GWT 2000 GWT 4000	GWT 6000
L in mm	2070	2230
B in mm	720	995
H in mm	+ 2070	+ 2030
h1 in mm	+ 1965	+ 1925
h2 in mm	150 mm	150 mm



TECHNICAL SPECIFICATIONS

	GWT 2000
Influent diameter	16 mm
Effluent diameter	50 mm / 2"
Drink water connection	25 mm / 1"



GWM CONTROL UNIT

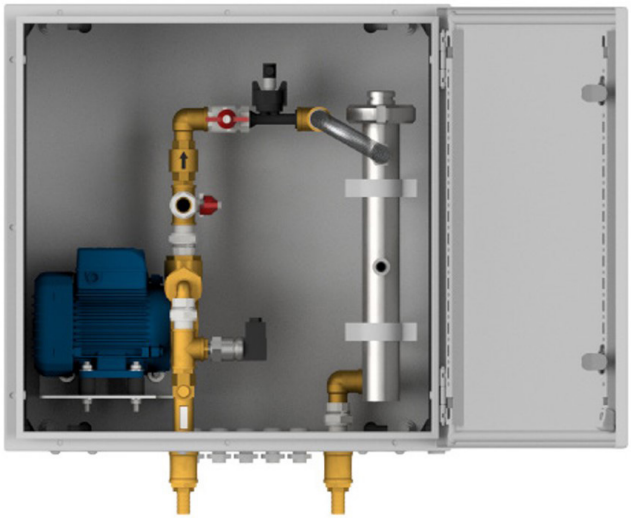
The GWM Control Unit ensures the control and monitoring of the grey water system. Each tank is equipped with analog and digital level sensors for increased operational reliability. The functioning of the membrane filter is continuously monitored by monitoring workload and flow. At a lack of filtered grey water, the control switches to temporary use of drinking water or rainwater.

The control must be connected to the internet for online monitoring.

The communication between the system and the DPT server takes place on basis of MQTT.

The device page provides an overview of all the current operating status. For the administrator, the system provides insight into the historical data for service and maintenance purposes. Water meters can also be provided to determine the efficiency of the system.

Alarms can be transmitted to the BMS system via modbus communication.



TECHNICAL SPECIFICATIONS

	Control Unit
Voltage (50Hz)	230 V
Current (Max)	16 A
Leakage power supply	10 mA
LxWxD (mm)	500x500x200
Internet Connection	CAT 5 UTP

DPT

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